

## CLAIMS

We claim:

- 1 1. A method for ordering multimedia content, comprising the steps of:
  - 2 segmenting the multimedia content to extract objects;
  - 3 extracting and associating features of the objects to produce content
  - 4 entities;
  - 5 coding the content entities to produce directed acyclic graphs of the
  - 6 content entities, each directed acyclic graph representing a particular
  - 7 interpretation of the multimedia content;
  - 8 measuring attributes of each content entity; and
  - 9 assigning the measured attributes to each corresponding content entity
  - 10 in the directed acyclic graphs to rank order the multimedia content.
- 1 2. The method of claim 1 wherein the measured attributes include intensity
- 2 attributes.
- 1 3. The method of claim 1 wherein the measured attributes include direction
- 2 attributes.

- 1 4. The method of claim 1 wherein the measured attributes include spatial  
2 attributes.
- 1 5. The method of claim 1 wherein the measured attributes include temporal  
2 attributes.
- 1 6. The method of claim 1 wherein the measured attributes are arranged in an  
2 increasing rank order.
- 1 7. The method of claim 1 wherein the measured attributes are arranged in an  
2 decreasing rank order.
- 1 8. The method of claim 1 further comprising the step of:  
2 traversing the multimedia content according to the directed acyclic  
3 graph and the measured attributes assigned to the content entities.
- 1 9. The method of claim 1 further comprising the step of:  
2 summarizing the multimedia content according to the directed acyclic  
3 graph and the measured attributes assigned to the content entities.
- 1 10. The method of claim 1 wherein the multimedia content is a three  
2 dimensional video sequence.

3 11. The method of claim 1 wherein nodes of the directed acyclic graphs  
4 represent the content entities and edges represent breaks in the segmentation,  
5 and the measured attributes are associated with the corresponding edges.

1 12. The method of claim 8 wherein at least one secondary content entity is  
2 associated with a particular content entity, and wherein the secondary  
3 content entity is selected during the traversing.

1 13. The method of claim 9 wherein a summary of the multimedia is a  
2 selected permutation of the content entities according to the associated  
3 ranks.